

Testimony of  
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before  
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"Foreclosure, Predatory Mortgage and Payday Lending in America's Cities"  
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Thank you Chairman Kucinich, ranking member Issa and distinguished members of the subcommittee for asking me to testify today. It is an honor to be here today to testify on Foreclosure, Predatory Mortgage and Payday Lending in America's Cities. The main focus of my testimony is payday lending.

I am a Professor of Economics at Clemson University. I formerly served on the staff of the Securities and Exchange Commission.

At Clemson we are interested in short-term consumer credit and, in particular, in whether consumers are better off having access to such credit. As part of our research, we have examined payday lending and its impact on consumers. Our research has found that payday lending has increased access to short-term credit without harming consumer welfare.

The number of payday lenders has surged in recent years with the high level of consumer demand for short-term, small-denomination credit and the increasing failure of banks to meet this demand. Providers of payday loans today include large regional or national multi-service providers of payday loans and large regional or national so-called "monoline" payday loan entities. With limited exceptions, insured depository institutions have left this market. Nevertheless, the number of payday loan offices nationwide has increased from approximately 300 in 1992 to more than 20,000 today as consumers seek access to credit.

Payday lending is one of many options for short-term credit, yet it remains relatively small in terms of overall economic impact. Short-term consumer credit as an industry generates more than \$95 billion in non-periodic-interest fees per year nationwide. Of those fees, only \$6 billion

are generated by the payday loan industry. More than \$30 billion dollars are generated in bank and credit union non-sufficient funds (NSF) fees, and more than \$50 billion are generated from credit card late and over-the-limit fees. By the way, these fees exclude the costs of other forms of short-term consumer credit, such as pawn, tax-refund-anticipation, credit card and all retail installment lending.

Some critics of payday lending have proposed limiting interest rates or eliminating these loans altogether. Economic theory tells us that neither price controls nor prohibition will help consumers who need access to capital. Borrowers have legitimate needs for credit, and payday loans exist today as one of many legal options.

All forms of legal credit are vast improvements over the loan sharks and wholly unregulated forms of credit that dominated the credit market prior to the 20th Century and that would once again dominate credit options for Americans in the absence of these lawful services.

Access to credit is best conducted in the open and competitive marketplace. Although likely always to be relatively costly due to the risk profile of the borrowers it serves and the fixed costs of delivery and collection, the payday loan industry is increasingly competitive, and fees and profit margins for providers of payday loans have been reduced in recent years. Recent research by Dr. Donald Morgan of the Federal Reserve Bank of New York has confirmed previously published research that consumers of payday loans shop for best prices, have benefited from increased competition, and have their overall welfare improved by increased access to credit.

Thus, contrary to the popular view of consumers turning to payday lenders in desperation, research shows that consumers who can access alternative sources of credit have opted for the relative convenience and speed of a payday loan. A Georgetown University survey in 2001 found more than half (59%) identified the most important reason for choosing a payday loan over another source was “quick, easy process, fast approval, less paperwork.” About 10% chose a payday loan because of a convenient location. Significantly, about 10% identified privacy as a critical and the most important reason.

For many, it is a choice of taking out a payday loan or confronting more expensive alternatives. For example, a consumer can merely write a bad check and incur bank and check recipients’ returned-check fees. A June 2005 study by Professor Thomas Lehman confirms that payday loan fees offer a cost advantage to consumers over NSF fees and are understood as such by consumers. Similarly, research conducted by Professors William Brown and Charles Cushman in 2006 showed that military personnel, a tiny subset of all payday loan users, often use payday loans to avoid the consequences to their credit rating and military careers of bounced checks.

The research currently being conducted at Clemson has found that payday loans have a unique effect on borrowers who have the fewest options for short-term credit, those in or near bankruptcy. While studying the relationship between bankruptcy and payday loans, we have discovered two interesting facts: The first is that, after controlling for other economic conditions, increased consumer bankruptcy rates lead to an increase in payday loan stores rather than the opposite. The second is that payday loan stores in a state decrease the expected rate of bankruptcies. While more research is needed, this strongly suggests that consumers who have

already declared bankruptcy turn to payday loans to meet their emergency needs, and that some consumers on the edge of bankruptcy avoid filing because of the availability of payday loans for meeting financial emergencies for which no alternative sources of credit exist.

This concept is particularly important in light of today's focus on mortgages and foreclosures. Having access to emergency cash that is not tied to a credit rating, home equity or assets is particularly important to consumers who are seeking to maintain their homes. Eliminating short-term credit and forcing cash-strapped homeowners to choose between their mortgage payments and medical bills or car repairs can only increase late payments and foreclosures among lower-income consumers.

In conclusion, Mr. Chairman, payday lending is one of many options available to consumers of short-term credit, and it appears to offer advantages of convenience, privacy and cost that make it welfare-enhancing for consumers. Furthermore, no data exist to show that payday lending is inherently a poor choice for consumers or for the economy as a whole. Demand for short-term credit will always exist as long as cash reserves for consumers are less than the emergency costs they are likely to face, and efforts to constrain market forces are more likely to harm rather than to benefit consumers who need short-term credit.

## Additional Written Testimony

### The Puzzle

If you Google payday lending, you will find only one favorable entry on the first two pages. A casual poll of friends and acquaintances will probably find many who do not know anything about the industry, but once informed almost all will react negatively. Most news stories call it loan sharking and the word "predatory" will certainly be in the first two or three sentences. Payday lending is the whipping boy of high-minded thought.

The problem is that it is hard to understand how this financial service fits these clothes. To me, "predatory" means that somehow a lender shills a consumer. A predatory loan is one in which the lender makes the borrower think she is getting a good deal when she is really getting a terrible one, one in which treasured assets are lost as if by theft. I think that there are probably lenders who are predatory, but to my mind none of them work in payday stores.

Let's look at the salient facts: Payday lenders have little collection recourse. If a payday borrower reneges on the loan, there is nothing much the lender can do except refuse to make further loans.<sup>1</sup> But here is the remarkable thing: payday borrowers default less than almost any other class of borrowers (2%).<sup>2</sup> How can this be? The only thing that it can mean is that payday borrowers really value access to this credit market. They pay the money back not because they have assets at risk but because they do not want to be foreclosed from future borrowing.

Again, it seems absurd to pay \$45 for a \$300 loan for two weeks. It is especially affronting to people with seven digit portfolios who search to save \$3 on a \$15,000 brokerage transaction. Nonetheless, the fact is that there is strong evidence that the people who take out payday loans want to keep this option open.

In addition to the low default rates, profit rates on payday lending are also rock bottom. They are much the same as the grocery industry. A quick look at the books of one prominent payday lender over the last several years shows a profit of around \$7 on an average loan of \$300. This is a profit rate of around 2.5 percent.

Admittedly, the profit rate could be calculated in many ways, but this is the right way to think about it from the perspective of the consumer. The \$300 loan is like a basket of groceries. The \$7 profit is the return above cost for the provider. It is a modest payoff and it only makes sense to be in the business if you can make a lot of these transactions. In other words, if you are a payday lender, you make money by giving the consumer something that she wants in a way that she appreciates so that she and others will come back.

Let's put these two facts together. Payday lending is a service that the borrowers value as evidenced by their willingness to maintain the good faith of the lender, and it is a service that only makes money if the lender maintains the loyalty of the customer. So how can this be bad?

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<sup>1</sup> In some states, it appears that payday lenders can bring legal action against defaulters. In on-going research we are attempting to assess the effect of these laws on the payday loan industry.

<sup>2</sup> This comes from an analysis of the annual reports of Advance America. Advance America is a publicly traded company that must issue an audited annual report each year plus a host of additional filings to the federal government. These are all available on-line.

## An Anecdote

For many years I have lectured about payday loans in my classes. I find it intriguing to see what students will say about this market. Many are disdainful, but most of my students are libertarian-minded, so they take the attitude that people should be allowed to do what they want.

However, I once had a student who admitted that he had been a payday customer. As he explained it, he was a work-study student. It was Wednesday and payday was Friday. He was down to eating Raman noodles, which is to say he was essentially out of money. His car broke down and it was going to cost \$300 to get it fixed. He had a date for Friday night so he went to the payday store to get the money to get his car fixed.

I did not probe deeply on his misfortune. Obviously, he was living on a shoe string so he was not going to be able to pay back the loan completely from his two week pay check. I did find out that it took him several cycles to get over it. But he was not fooled about the cost of loan. He just wanted his car for his date.

I never knew exactly why a payday loan was his chosen alternative. I presume that he did not have a credit card and was unwilling or unable to borrow from friends or family. Clearly something pushed him into a spell of payday borrowing precipitated by his car troubles. After he was finally able to pay off the car repair cost, he exited the payday market.

What we would like to know is, how typical is this student's experience.

## Alternative Hypotheses

Opponents of payday lending make several arguments against this business. One is that consumers are fooled about the true cost of the loan. Another argument is that payday lenders trap consumers into a cycle of debt. And finally, consumer advocates suggest that payday borrowers are being fooled into thinking that they need the product when they could get by without it.<sup>3</sup> I would like to address these arguments one by one and then present some scientific facts that inform us on the issue.

The first argument is not seriously considered even by payday opponents. Of all of the financial products on the market, payday loans are the simplest to understand. The customer writes a check for \$345 and gets \$300 in cash. The cost of the loan is patently obvious.<sup>4</sup>

The debt-trap argument is the fall-back position for payday loan opponents. They claim that consumers do not recognize that it will take several rounds of payday borrowing to pay off the loan. The average payday borrower probably takes out around 15 loans a year.<sup>5</sup> We have a picture of a payday borrower who is consistently, month after month, borrowing a relatively small amount of money for a relatively short period of time, just to get by. It seems unlikely that consumers are ignorant of their plight. Also, to call this a debt trap is a pejorative and disingenuous accusation against the lender. The payday lender does not make money by trapping people in a loan they cannot pay back. The payday lender wants the consumer to repay the loan.

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<sup>3</sup> Payday loan opponents make many more arguments, but this list forms an umbrella under which they all seem to fit.

<sup>4</sup> As an amusing side note, back in the 1970s consumer advocates claimed that consumers could not understand interest charges on consumer loans and forced regulations on lenders to inform customers about the total amount of money they would pay in interest charges. Payday loans do exactly this as part of the standard business model.

<sup>5</sup> Statistics are ambiguous on this. The implied number based on analysis of the 2004 annual report from Advance America is nine. Nonetheless, it is likely that the average is more than 10, including all definitions of rollovers, extensions, and new loans.

So we move to the next argument against payday loans: payday loans offer people something that they do not need. Even if payday borrowers fully understand their position, they are behaving stupidly. They are hurting themselves and possibly others. And they should be stopped from doing it. Consumer advocates are fundamentally arguing that the cost of payday loans is unconscionably high and borrowers should be prohibited from paying so much even if they are willing to do so.

This is the core of the argument against payday lending. Moreover, it is a legitimate argument. Society chooses to regulate many activities where we think that people are unable to personally restrain themselves. For instance, we regulate the consumption of drugs and alcohol. So it may be that the same thing is true of payday borrowing, but there is no theoretical reason to believe that this is true, and no systematic empirical evidence has been presented that it is so.

Even if payday borrowers have already fallen into financial distress (which seems to be supported by the facts) does payday borrowing cause them to fall further into the abyss of social distress and mire them forever in the muck of financial indigence, or does payday lending offer financially distressed consumers an option of borrowing small amounts of money, obligations within their capacity to repay, that allow them to clear the hurdles that they face week after week until they break into the clear? Is it not possible that a payday loan allows a father to buy a present for his child on her birthday adding to the well-being of the family? In this setting, is a \$50 fee too much? No doubt, proper planning would have saved the \$50, but we have all forgotten birthdays.

I propose the following questions: Do payday loans mitigate or exacerbate social ills? For instance, where payday borrowing is available, are crime rates higher, is divorce and child neglect more common, are people more homeless and hungry, is school performance lower? What is the marginal effect of regulation? Where payday borrowing is more restricted, are there more or less social problems of the sort listed above?

I think that the real question concerning the payday loan industry cannot be answered with anecdotes. The real question is whether or not society in some aggregate sense based on hard and fast measures of welfare is made better off or worse off by payday lending.

### *One Answer*

We do not yet have answers to all of these questions. However, we do have one answer that we will present to this honorable group today. We have looked at personal bankruptcies and compared the incidence of bankruptcy to the availability of payday lending. This analysis is scientific and systematic. It follows the conventions and methods of standard economic research. The analysis is discussed in detail in the next section. However, let me give a broad-brush summary here.

Bankruptcy is one measure of social ill. We also want to look at others, but I think that we can all agree that personal bankruptcy is bad. A straightforward test of the hypothesis that I have proposed above is: Does payday lending cause bankruptcy? If payday lending causes bankruptcy, then the next step would be to investigate the extent of this problem and if it is pervasive, to propose regulations that mitigate it. On the other hand, if payday lending does not cause bankruptcy, then at least we have some evidence that payday lending is not ruining society and maybe we should leave payday borrowers alone, foolish though they may be in our eyes.

To summarize our results, payday borrowing is predictably the result of bankruptcy not the cause of it. Moreover, if anything payday borrowing reduces bankruptcy rather than increasing it. The scientific evidence is that as the number of payday loan outlets in a state

increases, the incidence of bankruptcy declines. Payday borrowing predictably *reduces* bankruptcy. This is quite a striking finding. Not only is payday lending not bad for society, it is arguably beneficial.

## Statistical Analysis of the Effects of Payday Lending

We approach the problem empirically in the following way. We want to examine the causal relation between social problems and payday loans. There are many measures of social problems that we would like to examine. One that we have gathered data on is personal bankruptcies. Bankruptcy is an appropriate metric in this case because payday loans are a financial instrument and if consumers are using this instrument in an excessive way, it could result in bankruptcy. We have gathered data on the number of personal bankruptcies in each state for each year since 1990.

For payday loans, we have data on the number of stores operating in each state. More precisely, we have obtained from the Community Financial Services Association (CFSA) data on their member stores. For all of the stores operating in March 2006, we know the state in which the store operates and the date that the store opened. So we have a measure of the growth of the industry across time and space.

The empirical question is whether payday stores cause personal bankruptcies or, alternatively, whether personal bankruptcies attract payday stores. To answer this question we use a Granger definition of causality based on the time sequence of events.<sup>6</sup> The idea is simple enough. If the number of payday stores in South Carolina increases between 2000 and 2001 and the number of bankruptcies increases from 2001 to 2002, we say that payday lending caused bankruptcy. Alternatively, if the number of bankruptcies in Georgia increased from 2001 to 2002 and the number of payday stores increased from 2002 to 2003, we say that bankruptcies caused payday stores to begin doing business.

Of course, Granger causality is based on more than anecdotal evidence. We must do statistical tests of these leads and lags in the opening of stores and filings of bankruptcies. Moreover, it is possible that the causality operates in both directions. Nonetheless the methodology is straightforward and widely accepted.

Table 1 shows the summary statistics for our dataset. [The tables are found at the end of this document in the Table section.] Included in addition to bankruptcies and payday loan stores is income, the unemployment rate, population, and the percent of the population without health insurance. These latter variables we will use to condition the number of bankruptcies by economic conditions. The unit of observation in Table 1 is a state-year. So, for instance, the average number of payday stores operating in a state between 1990 and 2005 was 49. The largest number was 914 which is California in 2005.

Personal bankruptcies varied from 522 (Vermont 1990) to 204,667 (California 1998), with a mean of 23,596 and a standard deviation that is slightly larger. Average disposable income over the period was \$22,424 per year per person. The unemployment rate varied from a low of 2.3 percent to 11.3 percent (West Virginia 1993). In other studies of bankruptcy it has been shown that the percent of the population that does not have health insurance is a strong predictor. This is almost certainly due to the fact that large medical bills cause financial crisis for people without insurance. The average across the states is 14 percent. The highest is Texas in 2002, but interestingly there are several other states above 25 percent in some years.

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<sup>6</sup> Granger causality is named for the famous time-series econometrician and Nobel Laureate Clive Granger.

To perform the Granger test, we calculate the change in these variables from one year to the next. So, for instance, Texas had 77,056 bankruptcies in 2002. In 2001, it had 58,056. So the change in the number of bankruptcies from 2001 to 2002 was 19,000. We also lag the values of all of the variables so that we can statistically relate the change in one variable in one year to the change in another variable in the year before.

Formally, we can write the simple Granger test as follows:

$$\begin{aligned}\Delta B_{i,t} &= \alpha_0 + \alpha_1 \Delta P_{i,t-1} \\ \Delta P_{i,t} &= \beta_0 + \beta_1 \Delta B_{i,t-1}\end{aligned}$$

where  $B_{i,t}$  is the number of bankruptcies in state  $i$  in year  $t$ ,  $\Delta B_{i,t} = B_{i,t} - B_{i,t-1}$ ,  $P_{i,t}$  is the number of payday loan stores in state  $i$  in year  $t$ , and  $\alpha$  and  $\beta$  are parameters to be estimated by linear regression. If payday loans cause bankruptcy, then  $\alpha_1$  will be positive indicating that increases in payday stores in the past is statistically related to bankruptcies today.

Let's move to the estimates. Table 2 shows the simple Granger test. Column (a) is the test of whether bankruptcies cause payday stores. The coefficient is positive and statistically significant at the 1 percent level. This says that bankruptcies do cause payday stores to open up. The coefficient magnitude says that an additional 1000 bankruptcies causes 1 additional payday store to open.

Next look at column (b). This is the test of whether payday stores cause bankruptcy. The coefficient is negative and statistically significant at the 1 percent level. If payday loans caused bankruptcy, the coefficient would be positive. However, it is negative. The interpretation of a negative coefficient is that payday loans reduce bankruptcies. This is a striking result and it clearly deserves further investigation, but on the face of it we cannot condemn payday lending out of hand.

Further investigation of the findings leads us to a more expansive model. Table 3 shows some extensions. Here we include several explanatory variables for bankruptcy—the unemployment rate, the percentage of the population that lacks health insurance, and disposable personal income. We include the current year value of these variables as well as one-year lags, all in year-to-year differences. We also include the change number of payday stores in the current year and the change in the number of stores one year before. Essentially this is the same regression that we reported in Table 2 with the addition of economic factors that we expect to be associated with bankruptcy.

The findings are basically consistent with our expectations. The strongest predictor of bankruptcy is the percent of the population without health insurance. As this percentage goes up, bankruptcies increase; every percentage point increase is associated with 1400 additional bankruptcies. The lag is also positive but not statistically significant. Unemployment and income in the current period also have the expected effect, though the coefficients are not large or strongly significant.

The variable of most interest is the effect of payday stores on bankruptcies. The contemporaneous value is positively related, but the Granger criterion does not speak to this. The contemporaneous value is the result of the simultaneous relation between the two factors. The variable of interest is the lagged value of the change in the number of payday stores and the current value of the change in the number of bankruptcies. Consistent with the coefficient estimate in Table 2, the estimate in Table 3 is negative and statistically significant at the 1



percent level. Again, we find that not only does the opening of payday stores not increase bankruptcies, if anything it reduces them.

The magnitude of this coefficient is not large, but it is consistently statistically significant in each specification. The magnitude says that every new payday store reduces bankruptcies by 40 to 50.

We estimate the model in OLS and also in three-stage least squares (3SLS). The 3SLS estimates take account of the fact that bankruptcies and payday lending are potentially simultaneously determined by the other economic factors included in the model. In the payday-store equation we include the unemployment rate and income because we imagine that these may be determinants of payday stores. We exclude the percent of the population without health insurance for lack of a theoretical reason to include it. (When it is included in the OLS specification it is not significant.) The unemployment rate effect on the number of payday stores is not statistically significant. Income has a positive effect in the current period and the lagged value is statistically zero. Again we see that the lagged value of bankruptcies is positive. That is, when bankruptcies increase in one year, the number of payday stores increases in the next.

## Other Facts from our Research

People at all levels of the economic scale have a need for access to credit. This includes both long term *and* short term loans. Typical forms of short term credit include but are not limited to, payday loans, bounced check fees, late fees, re-connect fees, pawn loans, title loans, and credit card loans.

Consumers choose payday loans for a variety of reasons, among them are a desire to avoid tapping into savings, convenience and price. (Fact Book p.14) I assert that the reason that people choose payday loans over credit cards is that they know if they have a(nother) credit card they will get into a “debt trap.” The problem with credit cards is that they are open-ended. People with credit problems tend to run credit cards up to the limit without good cause.

Payday borrowers are typically young: over 60 percent of Advance America’s customers are between 18 and 44 compared to 40 in the population at large. They are consumers who have bank accounts, commonly own their homes, and have income levels only slightly below the median.

The use of payday borrowing by the military is a hot-button issue. Let me highlight some recent findings in a study by Dr. William Brown and Dr. Chuck Cushman on military lending. (Dr. Brown holds a PhD from Clemson and is now at UNC-Greensboro; Dr. Cushman is a graduate of West Point and a professor at the George Washington University.)

Only a small fraction — 13% — of military enlisted personnel stationed near a payday loan store have had a payday loan in the last year. Given the relatively low overall default rate for such loans in general, the claims of some opponents of payday lending that payday loans are a threat to military readiness appear unsupported.

Military enlisted personnel who have had payday loans repay them more quickly and are more likely to remain out of debt than their civilian counterparts: 49% of military enlisted payday-loan borrowers reported they have used a payday loan no more than twice in the last year (compared to 16% of the general population of payday borrowers); 79% said they had no more than four loans in the last year (compared to 65% of the general population).

The location of payday loan stores has been a point of criticism by payday loan opponents. Opponents claim that payday loan stores are located near military bases and in African-American neighborhoods with the implication that payday lenders are somehow

“targeting” these groups. This argument is based on the presumption of the false premise. It assumes what it is trying to prove. It assumes that payday loans are bad. The evidence that we presented in the last section shows that payday stores move in to meet the demand for their services. That is, we show that as bankruptcies increase, payday stores increase. The same fact arguably applies across the board. Where there is a demand, we expect the market to respond. So the fact that payday stores locate near military bases or in African-American neighborhoods does not in and of itself incriminate the industry. The question remains, does payday lending make people better or worse off. If it makes them better off, then the fact that the stores locate nearby is good, not bad.

## Tables

**Table 1. Summary Statistics**

	<i>mean</i>	<i>std. dev.</i>	<i>min.</i>	<i>max.</i>
Bankruptcy Filings—Non Business	23595.82	27679.73	522	204667
Disposable Personal Income	22423.83	5321.04	11910	48432
Unemployment Rate	5.22	1.42	2.3	11.3
% of Population without Health Insurance	13.99	3.95	6.1	25.8
Population	5329.13	5961.69	463	35940
Payday Loan Stores	49.36	105.10	0	914

Notes: 816 observations by state by year, 1990 to 2005. Income in current dollars. Payday loan stores by year of opening; from CFSA for stores that were still in business in March 2006.

**Table 2. Simple Test of Granger Causality between Bankruptcy and Payday Lending**

<i>Independent Variables:</i>	<i>Dependent Variables:</i>	
	(a) Change in the # of Payday Stores	(b) Change in the # of Bankruptcies
Lag of the Change in the # of Bankruptcies ( $\div 1000$ ) [ $B_{i,t-1}$ ]	0.95 (2.52)	
Lag in the Change in the # of Payday Stores [ $P_{i,t-1}$ ]		-42.27 (-3.99)
Intercept	8.39 (5.94)	3698.28 (7.92)
R-squared	0.05	0.02

Notes: 714 observations across states for years 1990 through 2005. All variables are the differences between current year and past year for each state. Bankruptcy regression weighted by population. Robust *t*-statistics in parentheses.

**Table 3. Granger Test of Causality between Payday Lending and Bankruptcy including Other Explanatory Variables**

<i>Independent Variables:</i>	<i>Dependent Variable:</i>			
	Change in # Payday Stores		Change in # Bankruptcies	
	<i>3SLS</i>	<i>OLS</i>	<i>3SLS</i>	<i>OLS</i>
Intercept	5.17 (1.24)	2.10 (1.14)	1672.02 (1.43)	2131.49 (1.56)
Unemployment Rate	-2.58 (-0.97)	-1.83 (-1.36)	1398.63 (1.87)	1384.75 (1.97)
lag	-0.03 (-0.01)	-0.55 (-0.37)	-1675.63 (-2.34)	-2083.86 (-3.24)
% Population with No Health Insurance			1428.81 (4.90)	1436.36 (4.94)
lag			319.28 (1.10)	258.86 (0.90)
Income ( $\div$ 100)	0.97 (3.38)	0.38 (2.51)	-8.68 (-0.11)	-1.73 (-1.70)
lag	0.38 (1.28)	0.22 (1.23)	198.08 (2.38)	3.12 (3.00)
Bankruptcies ( $\div$ 100)	-0.03 (-2.11)	0.03 (0.79)		
lag	<b>0.10</b> <b>(6.51)</b>	<b>0.10</b> <b>(2.65)</b>		
Payday Stores			20.88 (1.56)	29.57 (2.22)
lag			<b>-57.18</b> <b>(-4.08)</b>	<b>-55.66</b> <b>(-4.03)</b>
<i>R-squared</i>		0.07		0.09

Notes: 714 observations across states for years 1990 through 2005. All variables are the differences between current year and past year for each state. Bold values represent values representing the test of causality. The 3SLS regressions and the OLS bankruptcy regression are weighted by population. Robust *t*-statistics in parentheses beneath coefficients.